



LAUREA
UNIVERSITY OF APPLIED SCIENCES
Together we are stronger

A student- designed and produced digital magazine: a case study of Pause magazine

Ljamin, Aleksandr

2015 Leppävaara

Laurea University of Applied Sciences
Leppavaara

A student- designed and produced digital magazine: a case study of Pause magazine

Aleksandr Ljamin
Business Information Technology
Bachelor's Thesis
August, 2015

Ljamin, Aleksandr

A student- designed and produced digital magazine: a case study of Pause magazine

Year	2015	Pages	51
------	------	-------	----

This Bachelor's thesis aims to describe the development and production of a digital publication source for a higher educational institution - Laurea UAS. The existing Laurea UAS student magazine - PAUSE was chosen as a basis for this thesis project. Project development process relies on both best common practices and previously produced printed media. This work highlights the importance of the usage of digital publication within an educational institution and provides a detailed guide on how to properly produce such publication.

Adobe InDesign CC was widely used within this project to create a digital publication. InDesign is a software application included in the Adobe Creative Cloud suite. It is a well-known publishing tool that has been present in the market for the past 16 years. In this document InDesign functions are explored and employed from the point of relevancy to the digital environment.

This thesis consists of theoretical and empirical sections. The theoretical section defines the research concepts used in this thesis and an overview of existing digital publishing platforms. The empirical section focuses on the development and implementation of the publication.

The final publication has shown positive results after testing on all the major available hardware and software environments including desktop, tablet and mobile. The target audience has been increased in multiple times from 300 to 1500 viewers. These results can be considered as a successful achievement of the thesis objectives.

Keywords digital publication, layout design, cross-platform, interactive, user-friendly, responsive, digital marketing, service awareness raising

Ljamin, Aleksandr

A student- designed and produced digital magazine: a case study of Pause magazine

Vuosi	2015	Sivumäärä	51
-------	------	-----------	----

Tämän opinnäytetyön tavoitteena on kuvailla korkeakoulun - Laurean ammattikorkeakoulun - käyttöön tarkoitetun digitaalisen julkaisulähteen kehittämistä ja tuottamista. Projektissa kehitetyn uuden digitaalisen julkaisulähteen pohja perustettiin parhaaseen yleiseen käytäntöön ja aikaisemmin tuotettuun tulostemediaan.

Projektissa käytettiin laajasti Adobe InDesign CC:tä digitaalisen julkaisun luomiseen. InDesign-ohjelma on osa Adobe Creative Cloud suitea. Se on markkinoiden tunnetuimpia julkaisuohjelmistoja ja on ollut saatavilla jo 16 vuotta. Työssä InDesignin toimintoja tutkitaan ja käytetään digitaalisten ympäristöjen toimivuuden näkökulmasta.

Opinnäytetyössä on kaksi osaa: teoria ja käytäntö. Teoreettinen osa määrittelee käytettävät tutkimuskonseptit ja esittelee jo olemassa olevat digitaaliset julkaisualustat. Käytännön osuus keskittyy julkaisun kehittämiseen ja toteuttamiseen.

Lopullisen julkaisun testaaminen tärkeimmillä laitteisto- ja ohjelmistoympäristöillä (sisältäen työpöytä-, tabletti-, ja mobiiliympäristöjä) tuotti lupaavia tuloksia. Kohdeyleisön määrä on noussut huomattavasti noin 300:ta 1500:een lukijaan. Näiden tulosten perusteella opinnäytetutkimuksen päämäärät on onnistuneesti saavutettu.

Avainsanat digitaalinen julkaisu, ulkoasusuunnittelu, järjestelmäriippumaton, interaktiivinen, käyttäjäystävällinen, responsiivinen, digitaalinen markkinointi, palvelumarkkinointi

Table of contents

Abbreviations	7
1 Introduction	8
1.1 Background: Case Company	9
1.2 About the project	9
1.3 Business need & problem	10
1.4 Objectives	11
1.5 Structure of the thesis	11
2 Research methods.....	12
2.1 Incremental build model.....	12
2.2 Incremental prototyping	12
2.3 Interviews	13
3 Digital publishing platforms	13
3.1 InDesign CC	13
3.2 ISSUU	14
3.3 Laurea LIVE.....	15
4 Establishment	16
4.1 Development plan.....	16
4.2 Team communication.....	17
4.3 Language of publication	18
4.4 Publication concept.....	18
5 Implementation	19
5.1 Concept & theme	19
5.1.1 Autumn issue 2014	19
5.1.2 Winter issue 2014	20
5.2 Layout design	21
5.2.1 InDesign CC	22
5.3 Visuals production.....	24
5.3.1 Stock image archives	25
5.3.2 Photography	25
5.4 Integration into Laurea UAS studying environment	26
5.5 Marketing and promotion	26
5.5.1 Laurea UAS internal channels	27
5.5.2 QR code utilization.....	28
5.5.3 Social media utilization	29
5.5.4 Cooperation with MyFrank Oy.....	31
5.6 Analytics & statistics	32
5.6.1 Bitly	32
5.6.2 Google URL shortener	33

5.6.3	ISSUU statistics	34
6	Features	34
6.1	Implemented	35
6.1.1	Interactive elements.....	35
6.1.2	Scalability & image handling	37
6.1.3	Text handling	38
6.2	Rational for further implementation	39
6.2.1	Content optimization for Newsstand apps	39
6.2.2	Animation & video elements	39
6.2.3	Interactive platform for contributors.....	39
7	Interview	40
8	Conclusions.....	41
	References	43
	Figures	47
	Tables	48
	Appendices	49

Abbreviations

Adobe CC	Adobe Creative Cloud
API	Application Programming Interface
BBA	Bachelor of Business Administration
FUAS	Federation of University of Applied Sciences
GIF	Graphic Interchange Format
HAMK	Hämeenlinna University of Applied Sciences
HTML	Hypertext Markup Language
ISO	International Organisation of Standardization
OS	Operating System
PDF	Portable Document Format
POS	Point of Sale
PPI	Pixel per Inch
QR code	Quick Response code
UAS	University of Applied Sciences
UI	User Interface
URL	Uniform Resource Locator
USB	Universal Serial Bus
UWP	Universal Windows Platform
WLAN	Wireless Local Area Network
WWW	World Wide Web

1 Introduction

The starting point of the active digital media development is closely connected with the evolvement of personal computing, mobile-first solutions and World Wide Web (WWW). These three aspects created a momentum for the companies to start exploring the new way of engagement with their audience. As one of the real-life examples, it can be seen on the Figure 1 that New York Times (NYT) has the annual growth of digital subscribers (Seward 2013).

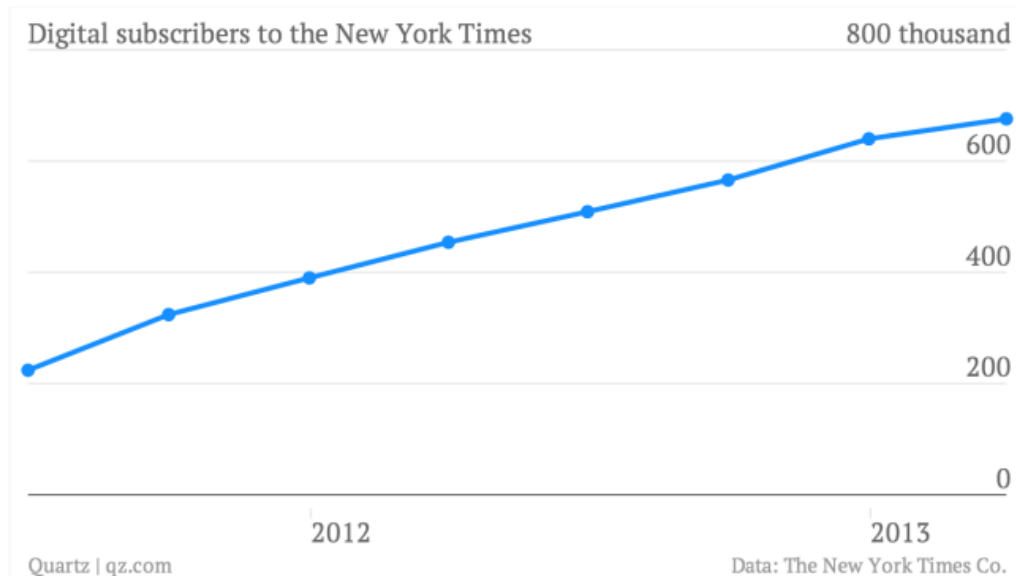


Figure 1: Number of digital subscribers for NYT

The field of technology in general had become cross-platform to transfer the same user experience between different operating systems (OS) and hardware environments, for example desktop, smartphone and tablet. As the latest industry example of sharing guaranteed core API layer across devices would be a Universal Windows Platform (UWP), allowing the installation of the same application package across all device types running Windows 10 (Microsoft 2015).

Before the popularity growth of digital media people were more connected to the physical part of it, as for example reading a printed newspaper, book or brochure. With printed media there is an untold requirement of having an access to multiple, for example, newspapers as a main source of information about past events and announcements for planned in the future events within different territorial parts of the world. For every end-user, in our case - reader or media consumer, this way of staying up-to-date is not flexible from the perspective of the rational time and personal finance management.

Physical media has certain limitations, where the costs of possible solutions overweight the market demand. In the situation where, for example, average media consumer wishes to re-

ceive a weekly issue of a certain printed newspaper from a foreign country, would lead spending a huge amount of time for research and a certain number of financial expenses to put the idea into practice.

Digital media tends to approach physical media limitations from another angle. Such terms as shared, cross-platform, multilingual, interactive, cost- and time efficient, end-user-centered, and touchscreen friendly, are widely used for the description of digital media. With an elimination of material or any other physical limitation as a way of engagement with audience there appears a transparency, which can be transferred into any digital environment. In other words, the term - digital - gravitates towards the flexibility and easy-to-access the desired content within a matter of seconds.

1.1 Background: Case Company

Laurea University of Applied Sciences is one of 26 polytechnics currently operating in Finland. It has 7 local units situated in Greater Helsinki Metropolitan Area: Hyvinkää, Kerava, Leppävaara, Lohja, Otaniemi, Porvoo and Tikkurila (Laurea UAS 2015), (OKM 2015). It is also a member of Federation of Universities of Applied Sciences (FUAS) in cooperation with Hämeenlinna University of Applied Sciences (HAMK) and Lahti University of Applied Sciences (LAMK). FUAS is the largest strategic federation of universities of applied sciences in Finland what accommodates around 19 500 students (14% of the total number of students in UASs), 1 400 staff members and has a turnover of approximately EUR 150 million. The RDI volume totals approximately EUR 23 million (FUAS 2015).

Laurea UAS has its official public web source currently operating on Microsoft SharePoint 2013 platform (Laurea UAS 2015), (Microsoft 2015). As a part of public internet profile Laurea UAS has multiple social media accounts including Facebook, Instagram, Pinterest, YouTube and Twitter (Laurea UAS 2009), (Laurea UAS 2014), (Laurea UAS 2014), (Laurea UAS 2009), (Laurea UAS 2014). There is also a private (so-called intranet) part of the official web source only available for students, lecturers and other university personnel. It is called Laurea LIVE. The information located on the intranet covers most of the university news (Laurea UAS 2015).

1.2 About the project

The project of implementing digital publication has led into the implementation of a digital student magazine - PAUSE. PAUSE has been present in the Laurea UAS environment in printed format since 2011. The previous attempts of creating a digital copy of the magazine were not fully realized. In other words, the production of digital version of the magazine has been put as this project's top priority.

From the beginning of 2014 the project was coming through the reorganization process - the completely new team (including no former members) has been recruited. I have joined the project in the end of February 2014, originally as a creative article writer. The new PAUSE team had two members: me as a creative article writer and Niina Haapamäki as an editor-in-chief. As a new team of two, we have been challenged to identify all the important contacts and details about the previous team workflow. Finding out all the important details required us to spend extra amount of time along with our by no means unimportant university studies. The pressure of being frustrated by the absence of guidelines and study load created an unnecessary amount of stress for the team, which caused Niina's early leave.

The critical change within a team did not affect me, vice versa I had become more confident and motivated by the opportunity to make a unique industry contribution without being limited by the previous approaches. The high level of my interest and involvement had caught the attention of the former head of Leppävaara campus marketing and communications department - Järi Wahlström. I was offered a promotion to the position of editor-in-chief of the PAUSE student magazine with an opportunity to complete my second work placement within the Bachelor of Business Administration (BBA) program at Laurea UAS (De Arruda Camara Antonius 2014).

I have been contributing to the project for 11 months in total, where 8 months were spent working on the position of part-time intern in communications department. Therefore the project can be classified as industry-based. The project had taken place in the same university campus - Laurea UAS Leppävaara - where my studies were conducted. The contacts in educational industry are considered to be more reliable in comparison to other fields. In other words, if the project is implemented within the educational institution it is guaranteed that the company contacts will be available throughout the whole project and there always will be someone to consult and supervise my progress (Dawson 2009).

1.3 Business need & problem

The need of having the digital publication at the educational institution's disposal originates from the information sources global digitalization. The trend of information inclusive digitalization arrives from the need to reduce printing and distribution costs. Digital publication has generated a wide range of new reading practices, such as complementary reading of text in multimedia, e-mail, Web browsing and e-learning.

The problem is defined by the nonexistence of the digital publication in the university environment. Meaning that, for now university is not able to apply new reading practices to its

internal environment and reach their audience in a more efficient way. This document aims to provide a solution for this industry-related problem.

1.4 Objectives

The direct outcome of this project is the production and digital publication of two unique issues of the student magazine available online on ISSUU publication platform (Laurea UAS student magazine PAUSE 2014).

The intended and long-term target is a foundation of PAUSE organization operating within Laurea UAS environment as well as arranging a merge with Laureamko. The main goal is a better engagement with university members including lecturers and students. Lecturers will be able to have a case project to apply to their course. Students will be able to gain field-related experience by being involved in the real-time project.

1.5 Structure of the thesis

The structure of this study can be divided into 4 major categories, as seen on the Figure 2 below: Introduction and Research methods; Digital publishing platforms and Establishment; Implementation and Interview; and Conclusions.

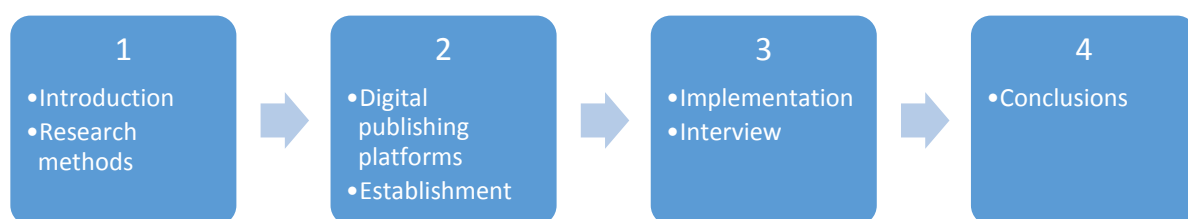


Figure 2: The structure of the thesis

The first part of this document includes the overview on digital media, the description of the case company - Laurea UAS and information about applied research methods. Second part aims to analyze digital publishing platforms as well as to describe the project establishment. Third part gives an insight and specifies methods of the implementation and technical tools

applied to the project. Third part also incorporates the interview material. The last part summarizes project results and evaluates the accomplished work.

2 Research methods

This study combines in itself multiple different approaches what are united and used as one research methodology. For example, research tools from qualitative methodology: interviews; tools used for software development: incremental approach including incremental prototyping; research tools from quantitative methodology: analytics. In other words, the presence of diversity within the research methodology is believed to provide a better insight as the project is analyzed from different perspectives. Additionally, this study cannot be categorized under the certain method due to novelty and unicity of the project in the case company environment.

2.1 Incremental build model

Incremental build model is one of the most common software development methods, what combines certain elements of the waterfall model and the philosophy of prototyping. During the application of incremental model the product is designed, implemented and tested incrementally until the product is finished (Ghahrai 2008). Within a scope of this project incremental model is applied not to the software but to digital publication accumulative production.

2.2 Incremental prototyping

Prototyping is another way to approach software development. It aims to create or simulate incomplete pieces of software, what may be completely different from the final product. In the scenario of multiple prototypes there appears a great opportunity to gather the user's feedback on implemented or simulated features. Gathering the feedback helps software developers to recognize bugs and observe user's live-time interaction with their product.

The final product is built by merging separate pieces of approved prototypes and integrating them in an overall design. Incremental prototyping provides an opportunity to reduce the time gap between the end-user and software developer (Wikipedia 2015).

2.3 Interviews

Interview is commonly recognized as a conversation between interviewer and interviewee, where interviewee is asked questions by interviewer and expected to provide his/her perception of certain statements and facts.

As mentioned previously, in a research methodology introduction paragraph, interviews also constitute a standard part of the qualitative research. In the context of qualitative research, interview is a technique to understand the experiences of others, what is usually based on a certain product or service (Valenzuela & Shrivastava 2002).

In this project there are presented two types of interviews: structured and unstructured. While structured interviews interviewee is asked preset or agreed before questions, what also stands for more formal type of a conversation. As for unstructured type of interviews, they are perceived as less formal with open-ended questions, what provides an opportunity for the interviewee to extend his/her answers without any particular constrains (Dawson 2009).

3 Digital publishing platforms

Nowadays in the world there is a great number of platforms both proprietary and open-source, what specialize in digital publishing development and production. To narrow down the range of solutions I have performed series of meetings, case observations and online research.

From the foundation of PAUSE there were two teams contributing to the project. I have met with the latest former editor-in-chief - Elina Koski, and one of her team members responsible for art direction - Mika Karjalainen. I have also contacted via email with the very first editor-in-chief - Toni Hildén. During meetings with former project members we have discussed the general process of their workflow, organizational aspects, like team management, and most importantly the utilization of technical tools. It came to light that both previous teams adopted Adobe software tools including InDesign as a main development and production tools. From this point I was advised to conduct a research on the mentioned above software and find the most efficient way to master it.

3.1 InDesign CC

For the first time InDesign 1.0 version was introduced in 1999, what leads to the latest version of InDesign Creative Cloud (CC) 2014.2 announced in 2015. This makes in total 16 years of

active presence in the market of digital desktop publishing software solutions (Adobe Systems Incorporated 2015), (Opticentre 2015).

The case observation had identified that Leppävaara campus of Laurea UAS has acquired licenses for Adobe CC software solutions. All the products within CC were preinstalled on local university machines. Fully configured desktop machines are available in Comms lab and also classes, where Implementing Visual Communication lectures are held.

3.2 ISSUU

ISSUU is a relatively new (launched in 2007) digital newsstand online solution (AOL Inc. 2014). ISSUU provides both native application- and browser-based cross-platform experiences for its users. In other words, any user running latest version of internet browser, for example Google Chrome, Internet Explorer, Mozilla Firefox or Safari, on a desktop machine or on a mobile device, can free-of-charge view media available on ISSUU resource and publish their own (Google 2015), (Microsoft 2015), (Mozilla 2015), (Apple Incorporated 2015). Additionally to browser-based experience, mobile device user, running one of the mobile OS's - Google Android, Apple iOS or Microsoft Windows Phone - can access platform optimized viewing and publishing experience via native application available for download on each OS application market accordingly (Google 2014), (Apple Incorporated 2015), (Microsoft 2015).

PAUSE project has been publicly available on ISSUU platform since 2012. Despite the presence of ISSUU account, many PAUSE issues remained available only on one of the Laurea UAS local internet-exposed file storages. Presumably, during the migration or an upgrade within the Laurea UAS infrastructure the information about certain PAUSE issues, located on local file storages, was completely deleted without any possibility for its recovery. During the meetings with former PAUSE members and online research I have managed to find several lost issues and upload them to ISSUU. PAUSE profile on ISSUU online newsstand may be seen on Figure 3.

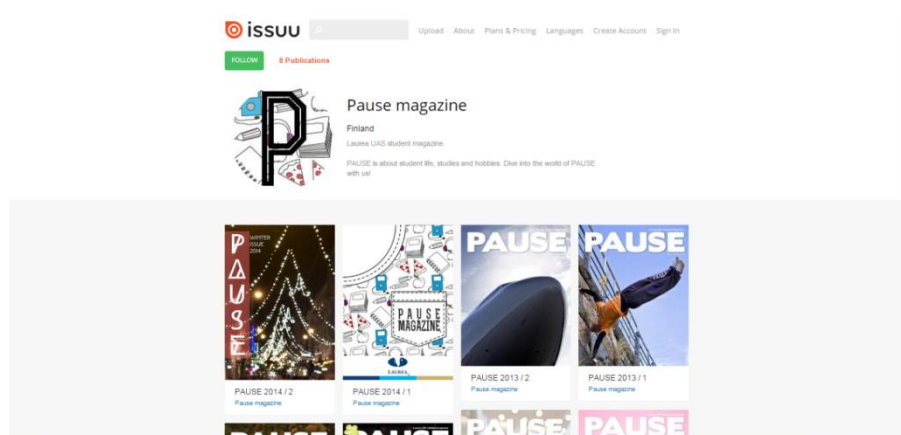


Figure 3: PAUSE's profile in ISSUU online newsstand

3.3 Laurea LIVE

Laurea LIVE portal (further referred as LIVE) has been briefly described before in this document as Laurea UAS intranet available for access solely for university members. This section defines LIVE intranet functionality, main purpose and target audience in a greater detail.

Laurea LIVE portal had been implemented in 2012. From its foundation LIVE started to serve the purpose of university intranet and maintained its path through the last three years. Each Laurea UAS campus has its own section, as it may be seen on the Figure 4. Unit's specific section is recognized automatically after the user login, for example, as I am a student of Leppävaara unit, the Leppävaara campus was identified accordingly.

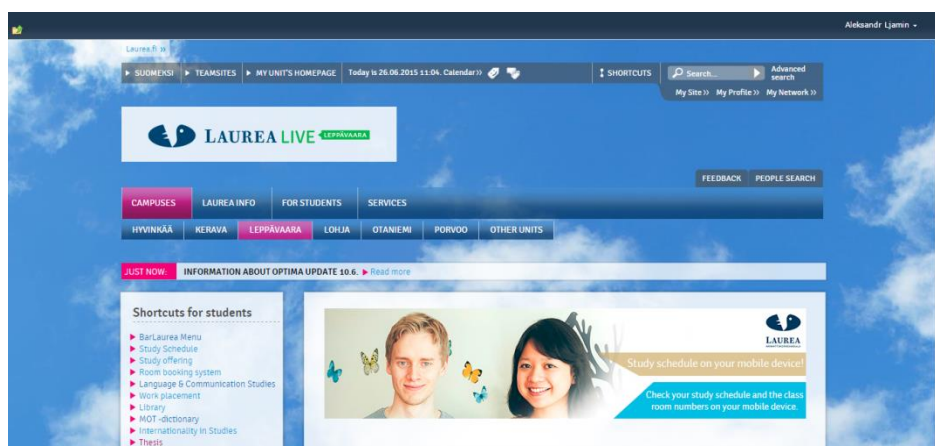


Figure 4: Front page of Laurea LIVE

When the unit is automatically identified, LIVE portal shows relevant to the unit information, as it is shown on the center section of Figure 5.

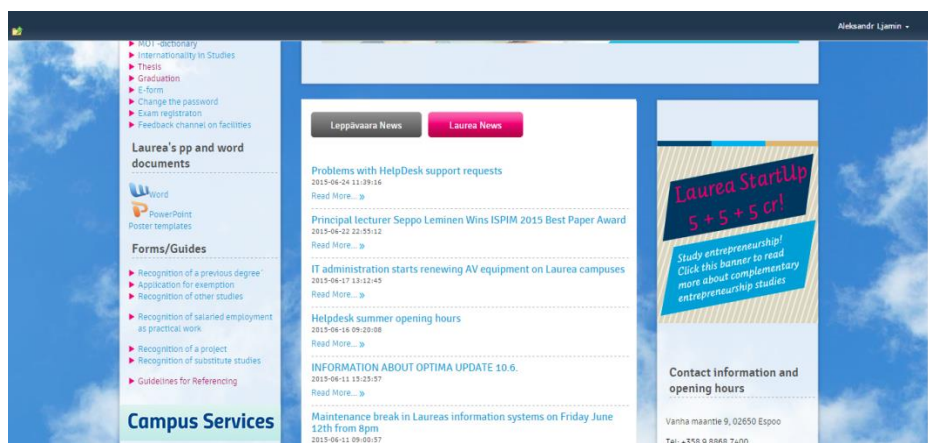


Figure 5: Laurea UAS campus specific news section

LIVE can be referred as the university main dashboard, where all relevant to studies information is mentioned. As LIVE has a constant university internal information flow it is important to share PAUSE announcements within this source.

4 Establishment

Certain preparations were needed to be taken before the actual implementation of the project. After the project background research conduction, there appeared a requirement to analyze the gathered data. Following analysis identified both well-designed practices, applied in the previous production approaches, and certain issues, what have been previously missed or neglected.

It became clear that from now on every produced piece of information should be treated carefully to reduce the human error, including the risk of data loss (referring to previously discredited magazine issues). Therefore all produced materials were duplicated on multiple data-processing machinery devices, for example on Universal Serial Bus (USB) flash drives and computer logical drives.

During the conducted open-end survey on lectures of Organizational Communication and Implementing Visual Communication in Leppavaara campus it has been identified that the level of the audience awareness about the presence of PAUSE in Laurea UAS environment is insignificant. According to that fact the growth of audience awareness should be approached as one of the main priorities within the upcoming implementation.

The shortage of PAUSE internal documentation should also not be left out of consideration. By producing project internal documents, for example action registers, development plans and meeting memos, current team takes into account and respects the project mentors as well as the project future contributors.

4.1 Development plan

As one of the initial stages of the project I was advised to create and present to my employer the project development plan for the whole period of my internship - eight months. I have been allowed to create the development plan in a free format without any adherence to a certain standard. Nevertheless I have used my initiative to follow Laurea UAS guidelines on the development plan layout design.

In the development plan there are described the new members' recruitment process, content evaluation process, the task diligence between different magazine members, several ways for audience awareness growth and the overall subject of publication.

4.2 Team communication

It was agreed beforehand how the exchange of information will be handled during the project. All the Laurea UAS members have their personal email designed specifically for the study related purposes. PAUSE magazine had its own email address within the same domain - pause.magazine@laurea.fi. From this point on our team had decided to use our university personal emails for the internal communication and file exchange, and use PAUSE email for the communication with external partners, during the recruitment process and for sharing the notifications with university personnel.

For appointing the meetings our team have used university internal email what has as an additional calendar feature. With online calendar it is easy to check the schedule, meeting agenda and attendees, as it may be seen on the Figure 6.

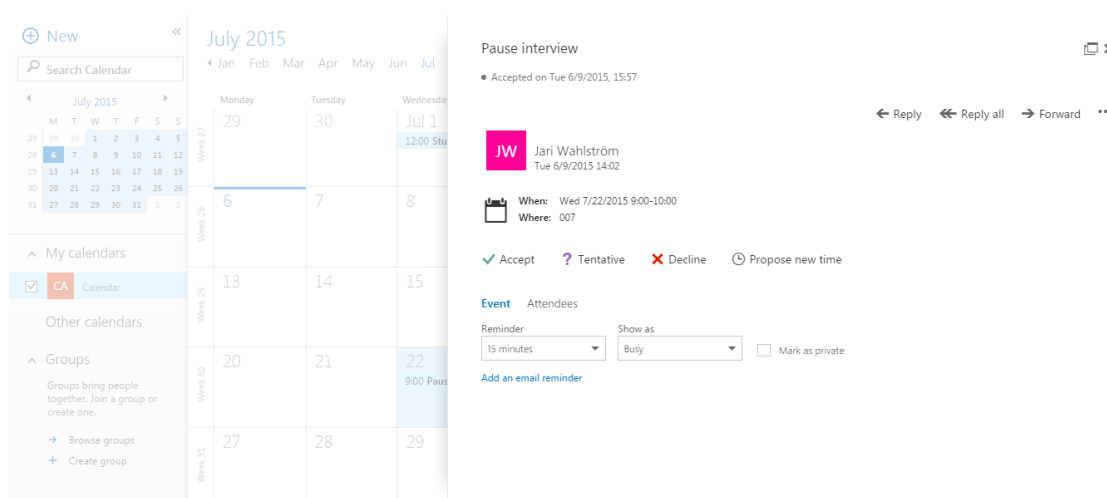


Figure 6: Microsoft Office365 Outlook Calendar meeting example

For the urgent scenarios, for example long delays in reply via email or via social channels, our team members were provided with phone numbers of their colleagues and could contact them in any period of their working hours. The costs of calls were not covered by the company budget, so caller had a need to pay the mobile carrier expenses by himself/herself.

As a team to be more productive and efficient, and also to decrease the risk of urgent scenarios, we have decided to organize weekly checkups preferably in person, but if a face-to-face meeting was not possible then we arranged a group Skype call (Microsoft 2015).

4.3 Language of publication

From its foundation the main language of PAUSE publication was Finnish, what greatly narrowed down the number of potential readers. English started to be partly applied starting from the issue №5 published in 2012, where two out of five articles were written in English. This decision created a better engagement with non-Finnish audience. The following issue №6 published in same year of 2012 was called an international issue, with all the content fully available in English.

Analyzing the path, what PAUSE was closely following and available for the utilization human resources, I have decided to create upcoming two issues of the magazine fully in English. As a further development, I have planned to have the content available in as many languages as possible. Also develop a feature for a user being able to switch between languages of articles seemingly by just choosing the preferable language. The idea for further development drives from the growing number of international students studying either as exchange or as full-time at Laurea UAS. According the growing number of international students in the English degree studying programmes I had presumed that they are advanced enough in English to translate the content to the mother tongue and vice versa.

4.4 Publication concept

The idea of unifying all the available content under one certain theme was suggested to PAUSE by my employer - Päivi Korhonen - the head of Laurea UAS communications department. In previous publications the content was mostly utilized with no particular attention paid to the fact of its connection between each other. That can be one of the reasons of having wide variety of insufficiently related content within each publication. The unification of all the materials under one theme creates a better understanding of publication's goal and gives readers a sense that it was produced by a tight-knit team.

Unification is also the best term to describe the internal processes within Laurea UAS at the time of 2014. I am referring to the massive merge between many internal departments constructing a clearer educational institution structure. This unification has also concerned the PAUSE project, providing the opportunity to scale up from operating under one unit located in Leppävaara up to all the seven campuses within Laurea UAS. This internal company change created an opportunity to collaborate on many areas of development and production including the formation of publication concept with a bigger number of internal contributors.

5 Implementation

The production of the project was heavily dependable on the described earlier establishment plan. The beforehand conducted research has compromised a great number of aspects for the future development and aimed to decrease possible risks. Although, the process of implementation had identified that there always must be a room for unpredictable changes, meaning having the high level of flexibility maintained all the way through the project. Integrating and applying extra corrections and changes must never be an issue for any team member, as it is impossible to predict the exact path of the project in future.

5.1 Concept & theme

Creating the concept for any type of publication involves every contributor in a team to have a similar strong vision of the idea and confidence in its implementation. It is also a highly complicated and questionable field from the perspective of engagement with a user. It may be so that the final product would not find the positive response in the person's mind or would be too complicated to understand without additional explanation. To stay on the right path, I have always been returning to the conception of one of the most famous modern visionaries - Steve Jobs. In his interview to Bloomberg Businessweek dating 1998, Jobs defined simplicity as a much more harder point than complex, meaning that working hard gets person's thinking clean and simple (Jobs 1998).

5.1.1 Autumn issue 2014

I have approached the first publication of PAUSE - autumn issue 2014 - with a skeuomorphic design. In other words, skeuomorphism is a way to create the environment with patterns and structures of another environment. For example, the user interface (UI) of the software calendar that imitates the appearance of paper desk calendar (Judah 2013). UI is the front-end of any product or service. It is based on the high level programming languages, such as HTML5 and JavaScript, in order to be less hardware and software resources consumptive and fast enough for the end-user to interact with.

The general concept of the first publication was to create a student-life-like pattern with objects what are the irreplaceable parts of the student life. The idea was to locate following objects on the t-shirt similar surface with t-shirt elements like stitched pocket and collar, what can be seen on the Figure 7. This issue cover was meant to literally "cover" all what is inside the student life. I have collaborated on the production of images with a freelance artist Mari-Liis Laht.

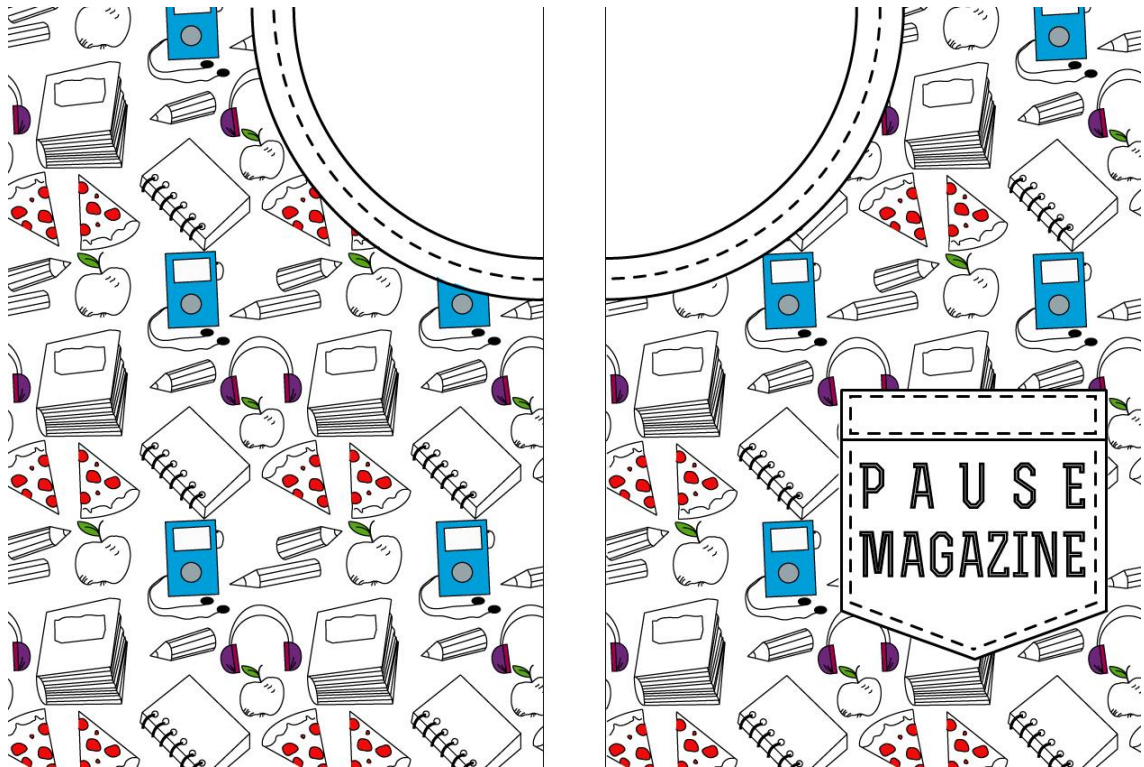


Figure 7: Back and front cover of PAUSE autumn 2014

5.1.2 Winter issue 2014

For the winter publication there appeared a concept to have knitted-Christmas-sweater-red-and-white pattern to compliment the upcoming holidays and share the warmth, needed so much in the cold winter days. Basically this concept derives from the idea of theme based pattern change, meaning the emulation of different environments within the same publication cover layout.

The mentioned earlier ideas caught fancy every member of our team. Although, after multiple unsuccessful implementation attempts it was identified that the team, unfortunately, do not have at the disposal enough time and knowledge to manipulate computer graphics in such a complex way. That was the main reason to begin using computer graphics manipulation for the cover production on the part-basis combining it with other techniques, such as photography as it may be seen on the Figure 8.



Figure 8: PAUSE winter issue 2014 front cover

5.2 Layout design

The layout or the framework of digital publication is the fundamental detail in the production process, as all the other elements depend on its implementation. It is essential to configure the layout first so that the content management will not be so distressing.

The additional reason on concentrating most of the attention on the framework lies within reaching interactivity and responsiveness of the publication. Former PAUSE team had developed a document containing graphical guidelines, what describes the way how they approached multiple design aspects. As the digital aspect was not widely applied in the mentioned before graphical guidelines it was better to approach it as a list of possible suggestions, but not the strict instructions to follow.

5.2.1 InDesign CC

The origin and appliance of Adobe InDesign have been described previously in the third section - digital publishing platforms - of this particular document. InDesign CC section in its place concentrates more on the exploration and application of the software to the project of PAUSE.

To create a publication layout in InDesign it is important to target an “Intent” section, what configures software to target the required platform as it may be seen on Figure 9. It is also important to turn on “Facing pages” feature shown on Figure 9. For digital publication using “Facing Pages” feature resembles reading experience of printed media in the digital environment.

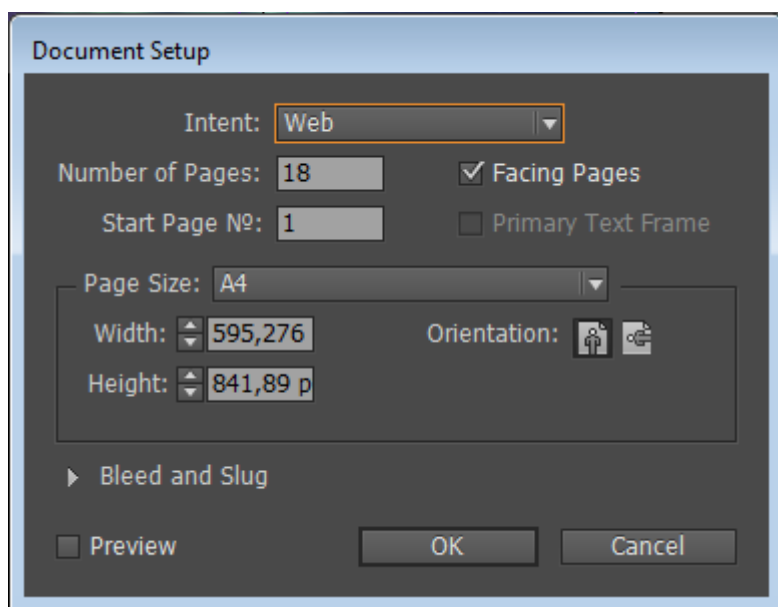


Figure 9: InDesign document setup

Facing pages are organized into spreads with having the first and the last pages as the cover. The “Pages” feature may be accessed from Application bar using “Window” section or pressing F12 key (on Windows) as it may be seen on Figure 10.

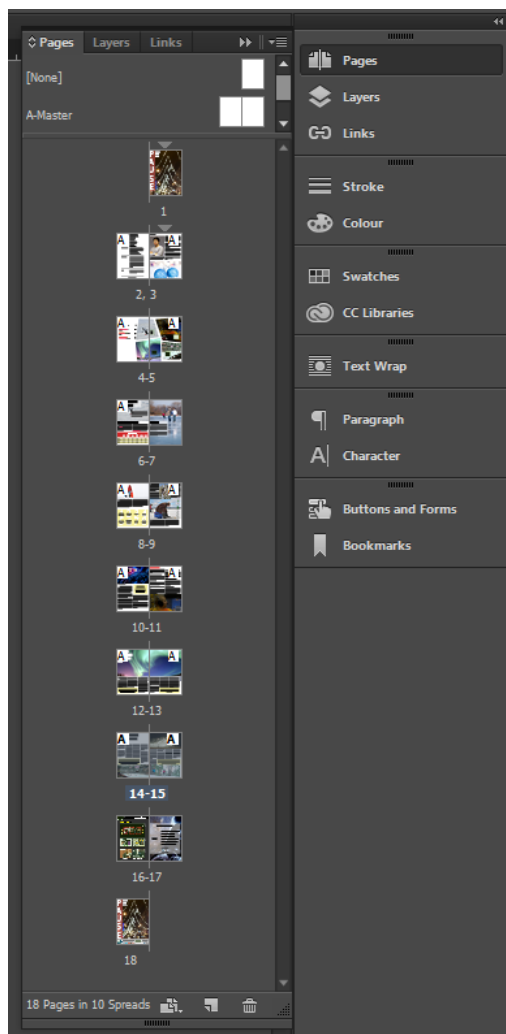


Figure 10: InDesign page setting window

Another by no means unimportant function is the usage of the “Master” pages. “Master” pages example is shown in the top-left corner of Figure 10. The configuration of “Master” pages is needed to ease the appliance of the same type of element to many pages, for example page numbering. In our case there are two “Master” pages: “A-Master” and “None”, as shown on the Figure 10 and Figure 11. “A-Master” is designed to have numbering in top left corner of odd pages and top right corner of even pages as shown on the Figure 11. “A-Master” also delivers a grid system to symmetrically align the content. “None” master is simply a blank page with no configuration applied. It is meant for the high dimensional content, that due its size covers all the space on the page and do not need to be aligned. Even though this example shows appliance of two “Master” pages there can be any number of “Master” pages configured to the user specific needs.

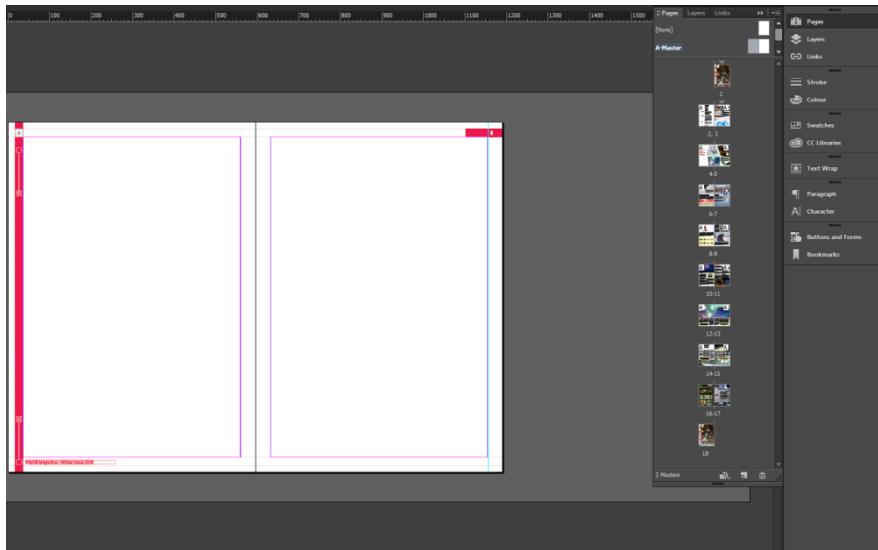


Figure 11: InDesign CC A-Master pages

Figure 12 shows the magnified “Pages” field where it may be seen that pages and spreads, what have “A-Master” applied are marked with an “A” in top corners and accordingly the pages what do not have any mark assigned to them (pages 1 and 7) have a “None” master applied.



Figure 12: “A-Master” and “None master” appliance example

5.3 Visuals production

For the publication content to be more appealing to the audience and also to compliment the message of the text it is important to include relevant to the topic visuals. There is also brilliant saying: “Use a picture. It worth a thousand words.” by Arthur Brisbane (one of the best known American newspaper editors of 20th century), what supports the relevancy of visuals usage (Wikipedia 2015), (Wikipedia 2015).

5.3.1 Stock image archives

There are a great number of web sources what specialize in providing high quality images for users. The schema of such sources existence is based on selling the copyright rights along with an image itself to users. The well-known examples of such web sources would be GettyImages and Shutterstock (Getty Images 2015), (Shutterstock Incorporated 2015).

These two sources mention in their service description an option of having a free access to royalty-free images, but in practice the choice is very poor and image dimensions are not scalable enough. Laurea UAS approached the issue of searching for the high quality images and provided a license to Pixhill - Finland-based stock images web source (Pixhill 2012). Laurea UAS students can easily refer to Pixhill in a matter of copyright policy in their projects. In student project cases when there is a need for an image with unusually big resolution it is possible to approach Comms department for aid.

In order to have various prototyping options PAUSE had a need to utilize visuals not only from Pixhill but also from other sources like Pixabay and Freedigitalphotos for the prototyping and for the final publication (Pixabay 2015), (FreeDigitalPhotos.net 2015).

5.3.2 Photography

In most cases the genuine and original photography is positioned to be better than a lone image downloaded from the stock archive. The photography produced specifically for one or another article has more of the engagement point in the reference to the emotional aspect. It is also a valuable experience for the photographer to be a part of an interesting project and use project deliverables in his/her portfolio.



Figure 13: Example of photography appliance in visuals for cover production

As mentioned previously in the document, before the digitalization period photography in PAUSE had a main impact on the visuals production. Formerly every PAUSE issue, except International issue, cover was produced with a photographic approach as it may be seen on Figure 13.

5.4 Integration into Laurea UAS studying environment

To raise the awareness and also to better engage with potential audience it was decided to offer cooperation to two Laurea UAS lecturers Organizational Communication and Implementing Visual Communication courses - Tarja Chydenius and Eva Forssén. After couple of meetings with lecturers they expressed their interest in the further idea development.

Organizational Communication course consists of multiple parts aiming to provide for students an overview of what the communication inside the company is like. The course has a section of article writing and I was allowed to propose the PAUSE concept to be approached as one of the options to write the articles for. I have had organized a brainstorm session for students to identify the possible topics of future articles. After the brainstorm session I was able to follow students' progress and provide my feedback on the team meeting and also via Optima working space.

Implementing Visual Communication in its place is concentrated on working with Adobe solutions especially Photoshop CC and Illustrator CC. Students are explained the value of the visuals and exercise to produce their own visuals. After certain negotiations with lecturers I proposed my assistance on helping students to find their inspiration and motivation to explore and create visuals. Same as in the previous case with Organizational Communication I have suggested students to participate in the project of PAUSE by contributing the visuals and layout examples. During the visuals development and production stages I have assisted the evaluation process and provided my feedback. It is important to mention that during the collaboration on the PAUSE project Adobe InDesign was added to the course as a piece of software to master in.

5.5 Marketing and promotion

After the product or service development and production there should be implemented a way to reach the potential audience. That is when the promotion takes place. Promotion is about creating touch points with an audience. To identify these touch points it is necessary to have an insight about the audience. For example, PAUSE is being developed by students for students, what means that contributors are present within the same environment as their audience.

My assistance in the lectures can also be considered as a PAUSE promotion. In this case audience have heard of the idea beforehand and participated in its implementation by themselves. Any type of participation usually leaves a participant with a state of mind of checking up the final product, to see the results of his/her contribution. This creates a potential user of the service. In the situation when the contributor is satisfied with the results, he/she would possibly share the news with others, what creates another point of engagement called word-of-mouth.

5.5.1 Laurea UAS internal channels

As it was mentioned previously in this document Laurea UAS has its own intranet called LIVE. It was one the main PAUSE goals to get a page or section organized within LIVE environment. Despite the fact that PAUSE was a project produced within the Laurea UAS it was complicated to reach this goal. PAUSE page started to be available in LIVE portal from the beginning of 2015 as it may be seen in the Figure 14. The reason behind such a long period of PAUSE integration was caused by the internal systems updates.

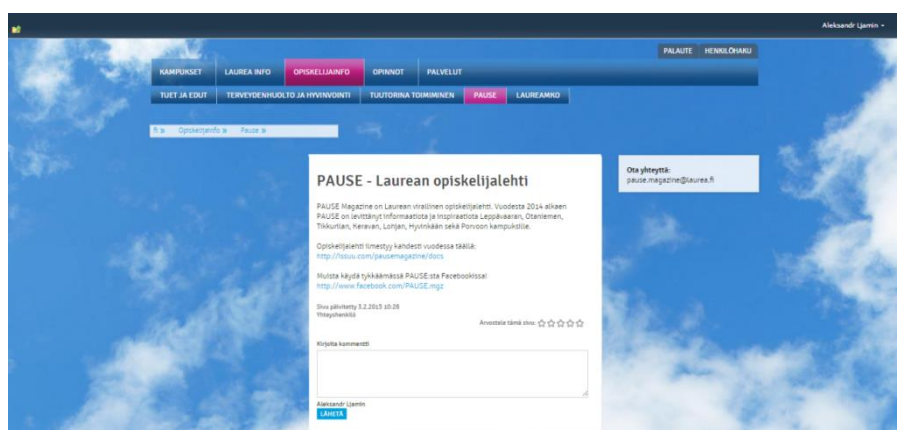


Figure 14: PAUSE page in Laurea LIVE

Another internal channel to use is Laureamko. Laureamko is Laurea UAS based student union. Laureamko is acting as medium between student life and outside world and vice versa. Student union organizes multiple events during the academic year. The organized events are informal and aimed to provide a networking platform for the students from the different areas of study within Laurea UAS.

The information about all the upcoming events organized by Laureamko was extremely difficult to find. Addressing that issue, PAUSE provided a space for duplicating the the events schedule on the one of its pages, as it may be seen on Figure 15.

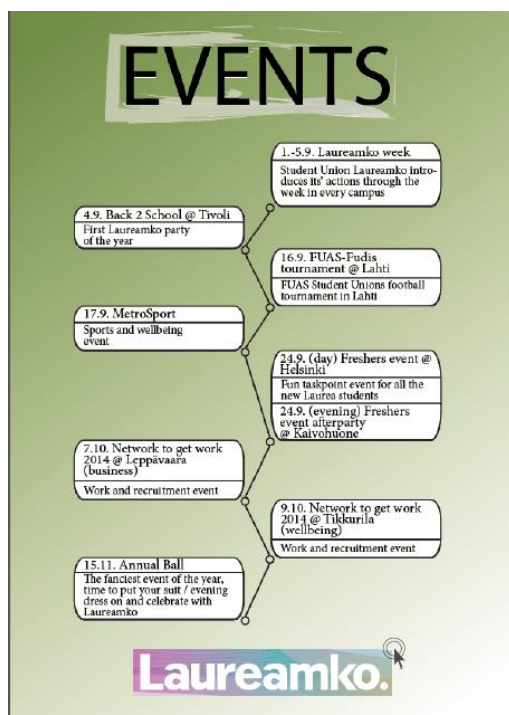


Figure 15: PAUSE autumn issue 2014 Laureamko events page

Even though Laureamko is an internal part of Laurea UAS it was highly complicated to organize the cooperation due to different reasons. There were great delays in the information exchange, what caused excluding the “Events” section from the winter 2014 PAUSE issue.

5.5.2 QR code utilization

Quick Response (QR) code is a type of open matrix barcode originally developed for automotive industry in Japan (Wikipedia 2015), (Microsoft Corporation 2011). QR code was designed as one of the large industry solutions to ease the use of tools in production management systems (DENSO WAVE INCORPORATED 2014). The successful appliance of QR code in the automotive industry as well as the standard validation by the International Organization for Standardization (ISO), had led to spreading worldwide improving the engagement with different types of audiences.

To access the QR code end-user's device must be equipped with a scanner. Within industries such devices as Point of Sale (POS) are heavily utilized for barcodes scanning. The usual end-user's smartphone equipped with any type of internet connection (WLAN, 3G and 4G) and camera can serve the same purpose as POS device in industries. Basically QR code designed for industries actually entered the additional market of civil smartphone users. Entering the additional market as well as having the code distributed on the open source basis, allowed organizations worldwide to engage with their customers in a new way. In common practices companies generated the QR code containing a link to a web source or web application for

product or service promotional purposes meaning limited offers and coupons. The similar practice was used for the PAUSE winter issue 2014 promotion, as it may be seen on the Figure 16 below.

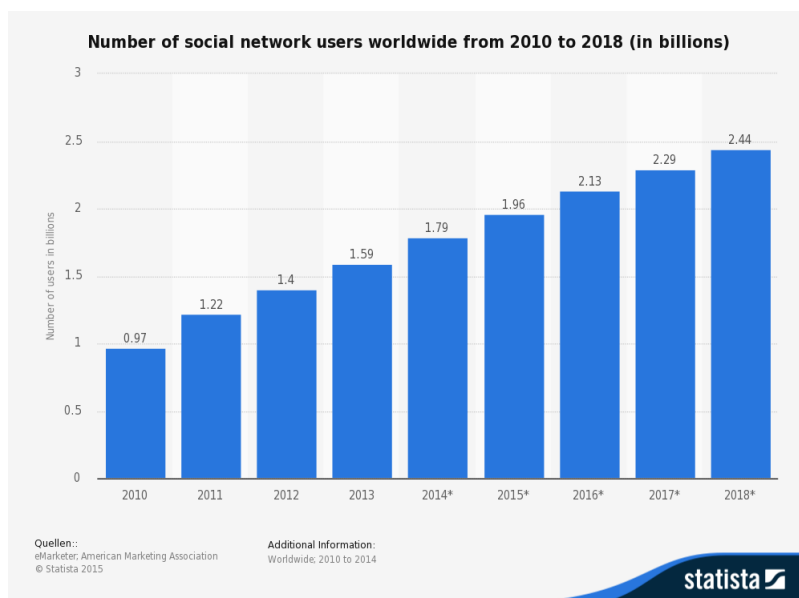


Figure 16: QR utilization in PAUSE 2014 winter issue A2 poster

5.5.3 Social media utilization

According to the annual-based table provided by Statistica Inc. and the survey by eMarketer there is a rapid constant users growth worldwide in the social networks usage (Statistica Incorporated 2015) (eMarketer Incorporated 2015), as it may be seen on the Table 1.

Table 1: Number of social network users worldwide from 2010 to 2018 (in billions)



Referring to the local audience in Finland the Official Statistics of Finland (OSF) had reported that one half of Finnish residents participate in social network services. In closer examination around 82 percent of 25 to 34 aged people followed some social network during three months period in 2014 (Official Statistics of Finland 2014).

Relying on the following numbers it would be harmful for the project not to utilize services provided by social networks. That was the main reason why starting from the year 2011 the official Facebook page of PAUSE was created. Although the Facebook page had already been created when I have joined a project, it definitely required a better maintenance. After the Facebook announcement of the latest PAUSE issue there were around 1500 people who had viewed the post, what tripled the higher number of the previous PAUSE posts views.

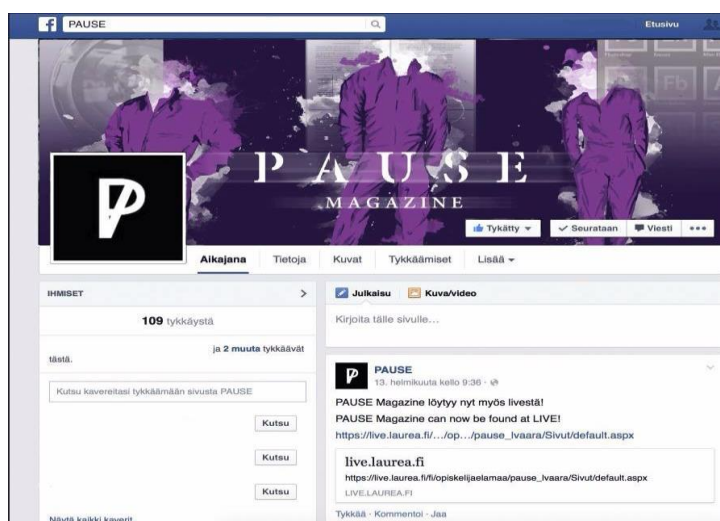


Figure 17: PAUSE Facebook front page

Unfortunately, the Facebook page of PAUSE no longer exists due to the recent internal merge with Laureamko. Although the page has already been deleted the last editor-in-chief of PAUSE - Petra Jääskeläinen - provided me a screenshot of last state of the front page, as it may be seen on Figure 17.

5.5.4 Cooperation with MyFrank Oy

MyFrank organization is specializing in the gathering information about all the available discounts and benefits for students. MyFrank is also responsible for issuing national student card (MyFrank 2015). MyFrank concept is to ease the search of the recent discounts and offers for students by putting together a list. Compiled list afterwards is available on the MyFrank web source so it is accessible to the public.

PAUSE had a certain contacts with MyFrank before my joining the team. Cooperation was mostly based on providing the advertisement space for the discounts and best deals. Relying on the previous collaboration it was simple to re-establish the connection. We have reached the agreement that PAUSE will provide a one page advertisement space for student discounts and best deals in both autumn and winter issues. The example of MyFrank advertisement may be seen on the Figure 18.

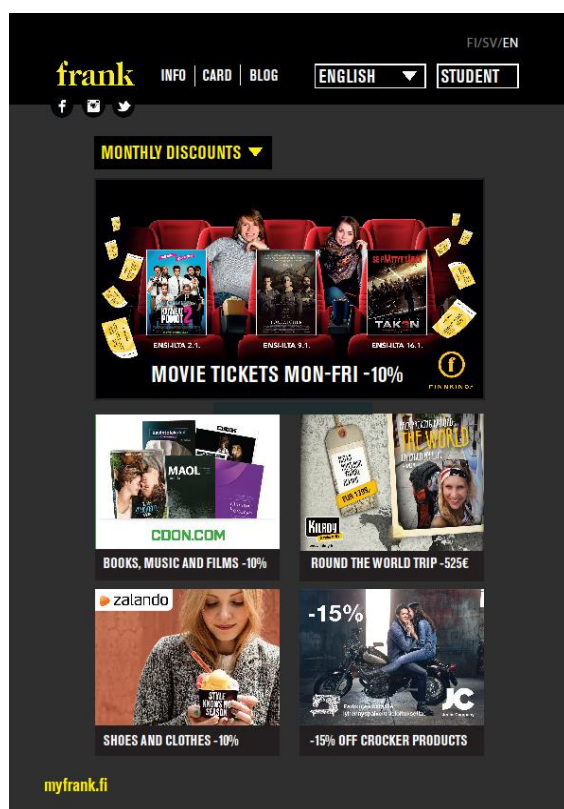


Figure 18: PAUSE winter issue 2014 MyFrank advertisement

For the future cooperation PAUSE and MyFrank had reached an agreement to establish the engagement with both target audiences. Within this settlement PAUSE was responsible of creating an insight article about services MyFrank provides, and MyFrank in its turn would be able to create a post about collaboration with PAUSE in its own social media channels.

5.6 Analytics & statistics

It is meaningful to analyze and follow the utilization statistics of the project, by the reason of ease of detection the best way of engagement with project's target audience and elimination of unnecessary features. For the companies analytics and statistics can be considered as an indirect user feedback.

In most of the times project end-user is intentionally unaware that there is a metadata gathered based on his/her service usage. The intentional aspect appears on the scene due to the user lack of attention paid to the service's terms and conditions document. All the service users are advised to read through the legal statement carefully and provide their agreement or disagreement by clicking on provided by default "agree" or "disagree" buttons. All the background statistics gathering operations are usually listed under the terms and conditions of the service. In the service usage analysis selected metadata is utilized with an aim to enhance and improve the user experience.

5.6.1 Bitly

Bitly is New York City based company specializing in providing URL shortening services. Bitly has launched branded short name domains in January 2010 (Bitly, 2015). Many world-wide known companies, including Adobe Systems, New York Times and Pepsi organized their cooperation with Bitly (Bitly 2015).

Link shortening and customization with Bitly is straightforward, for example, the original link for the PAUSE winter issue 2014: issuu.com/pausemagazine/docs/release_c33daa5495cccf, what can be shortened and renamed into: bitly.com/PAUSEwinter2014. Shortened and custom-named links are considered to be more user-friendly, as user can easily remember, write down and type them manually in the internet browser address bar.

Additionally to link shortening services Bitly provides tools for traffic analysis, as may be seen on the Figure 18. Traffic can be filtered in different ways to examine statistics of all the time, past hour, past 24 hours, past 7 days, past 14 days and past 30 days, as it is also displayed on the Figure 19.

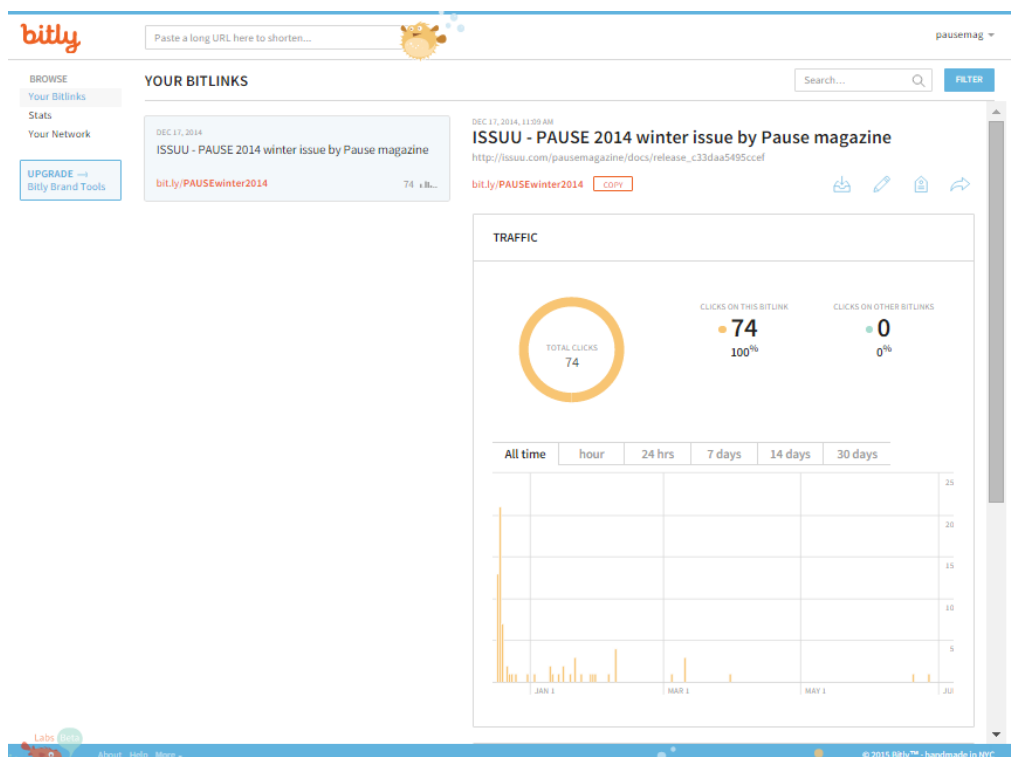


Figure 19: Traffic of the Pause winter issue 2014 shortened Bitlink

To be able to access the analytics functions of Bitly there is a need to create a personal account. All the links what user has shortened will be displayed in “Your Bitlinks” section, what may be seen on the Figure 19.

5.6.2 Google URL shortener

The other solution for URL shortening, what is there in the freeware market, is provided by Google and called Google URL shortener (Google, 2012). The following service is also optimized to be user-friendly as Bitly, meaning having a clear instructions on how to use the service, as it may be seen on Figure 20.

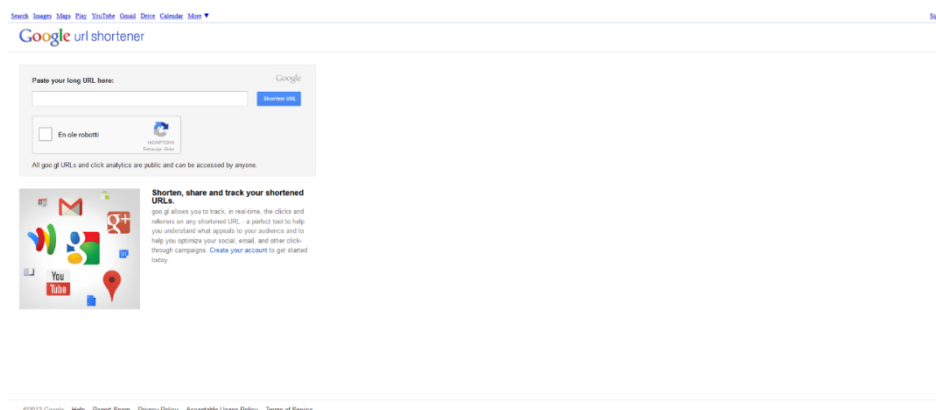


Figure 20: Google URL Shortener front page

The link to the autumn 2014 PAUSE issue was shortened using this service. Although afterwards PAUSE team had identified that there is no option of following the statistics of the link without being signed into the Google account, what, unfortunately, have not been created before the link shortening. Another issue PAUSE team had met, was that the Google URL Shortening service is being highly outdated as it may be seen on Figure 19. The last time the update took place was in 2012, what makes a three years gap in the web service maintenance.

5.6.3 ISSUU statistics

ISSUU online newsstand provides a free build-in statistics tool for publishers to see, for example, how many times the publication was viewed by user for more than 2 seconds, as may be seen on the Figure 21 in the “Reads” section.

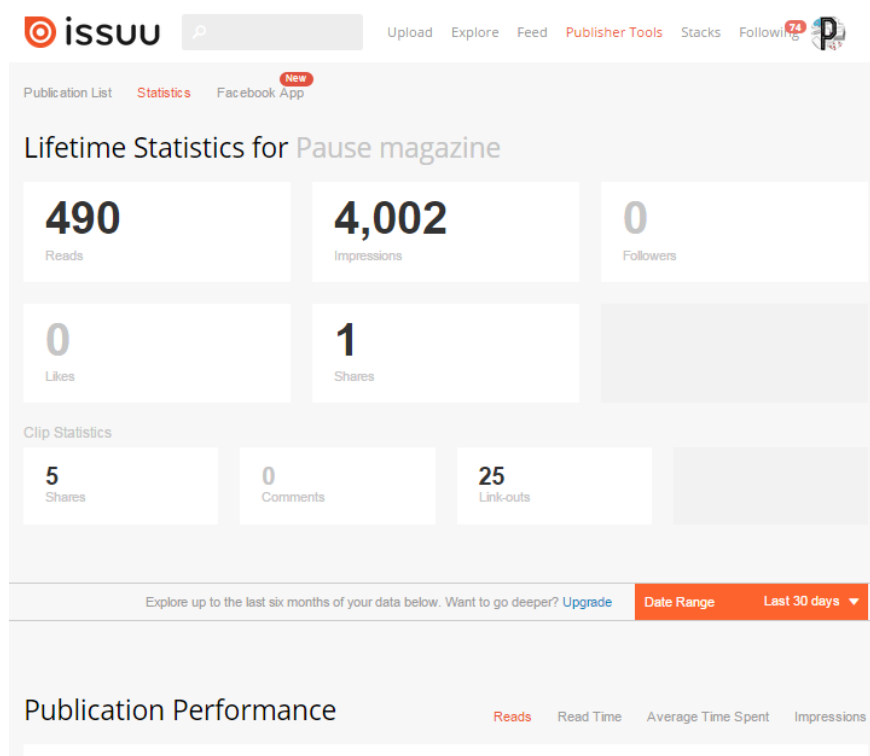


Figure 21: ISSUU Lifetime Statistics for Pause magazine

6 Features

Features in this context would be the unique pieces of publication what not only utilize the existing technologies but also make the final product to stand out. Every implemented feature aims to be a welcome surprise for a user but not to shockingly disappointing experience.

Features are divided into two categories: implemented and rational for further implementation. Such diligence originates from constraints of timeframe and available resources.

6.1 Implemented

This section provides an overview on the features, what PAUSE team was able to implement during the project. Such features as interactive elements, scalability & image handling and text handling are described in a detailed way. Feature description is supported by multiple screenshots of work progress and final results.

6.1.1 Interactive elements

For users to interact with publication content it was important to create interactive elements. As it may be seen on the Figure 22 for interaction purposes there were created buttons on the static elements, in this example static elements are page numbers of page navigation.

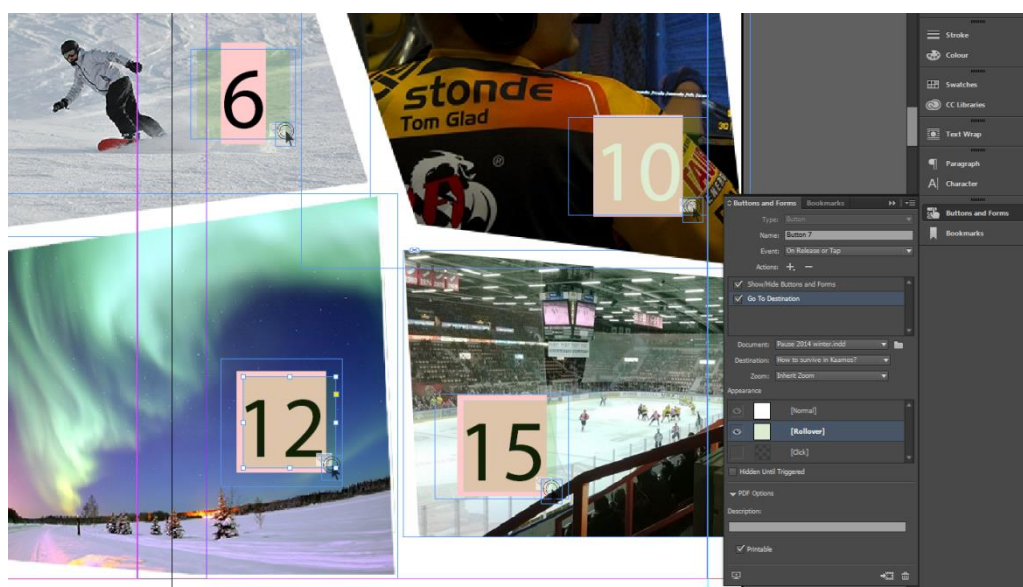


Figure 22: InDesign CC interactive buttons

As it may be noticed on the Figure 22, every interactive element is marked with an arrow-like icon. The icon is meant to help the user to identify the interactive element. The description of the icon purpose is provided in the first page of the publication as shown on the Figure 23.

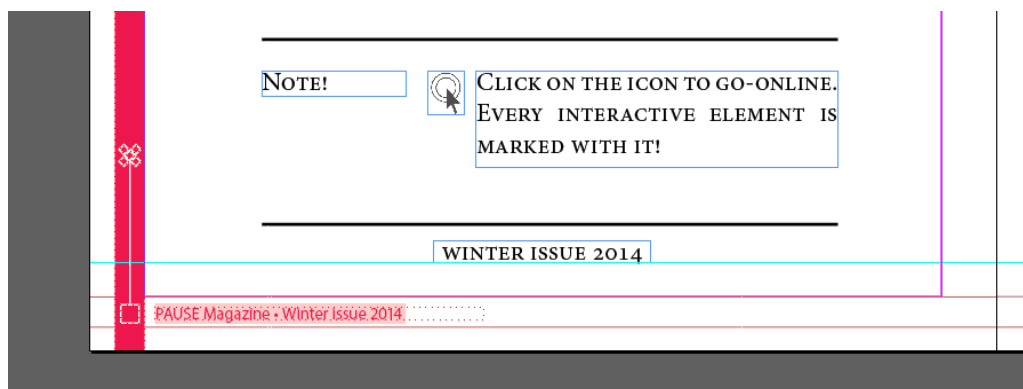


Figure 23: Interactive element icon

Even though the interactivity was implemented using InDesign, ISSUU platform did not have tools at their disposal to automatically detect interactive elements in PDF document. This was the main reason to explore ISSUU tools and implement interactivity locally on the platform as it may be seen on the Figure 24.

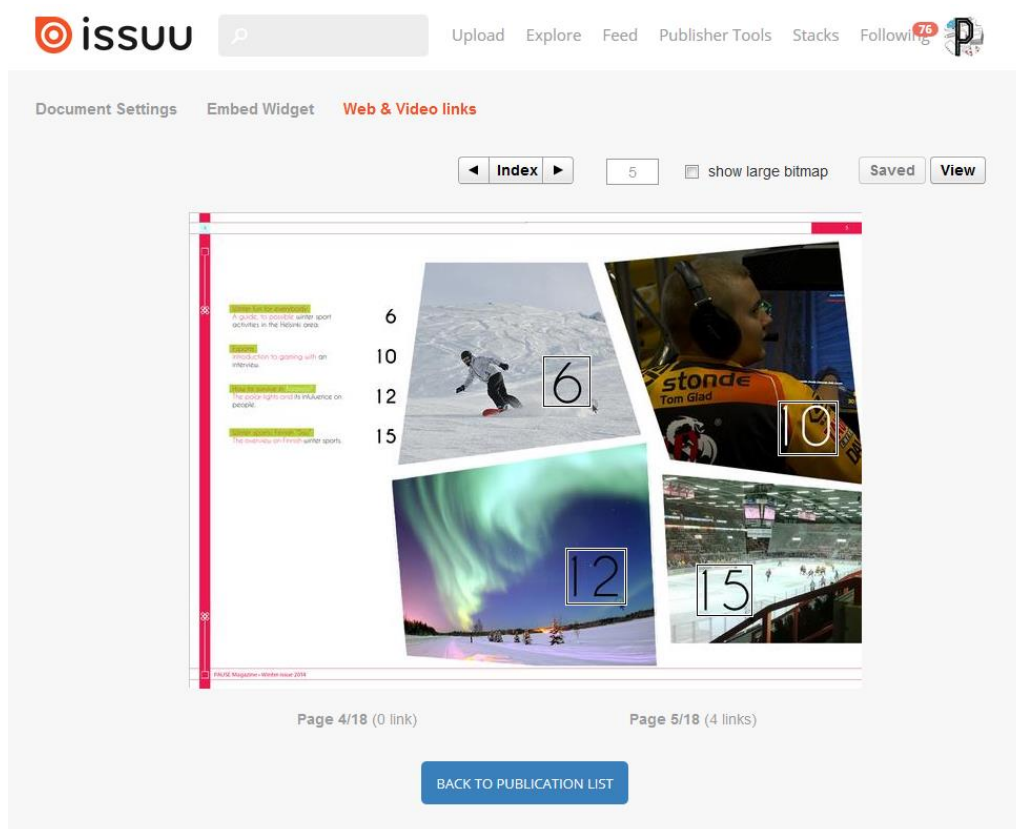


Figure 24: ISSUU Web & Video links integration

Basically, within ISSUU environment it is possible to create an element hyper linkage, what afterwards in the final publication simulates element interactivity. Figure 25 shows the final version of the same navigation elements edited before in the Figure 24.

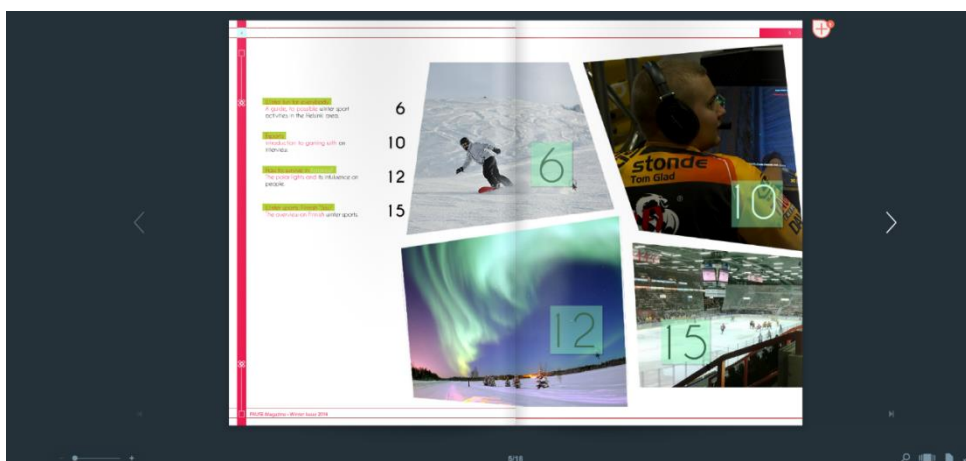


Figure 25: ISSUU publication integrated links appearance

6.1.2 Scalability & image handling

The Figure 26 shows one of InDesign software windows. On Figure 26 it can be seen that “View” section is configured to “Fit page”, what means that when the user opens the PDF document it automatically scales up or down to the current window size. Moving forward on the Figure 26 export settings, it is important to notice one of the aspects of “Image Handling” section: Compression. With a compression set at “lossless” images do not lose any data, what can be considered redundant or irrelevant. For the digital publication the questionable section of “Resolution (ppi)” can be left default on the mark of 72. Pixel per Inch (PPI) defines the number of assigned pixels to every inch. The research showed that the change of resolutions only matter when producing documents for print, but not for digital environments (Photoshop Essentials 2015).

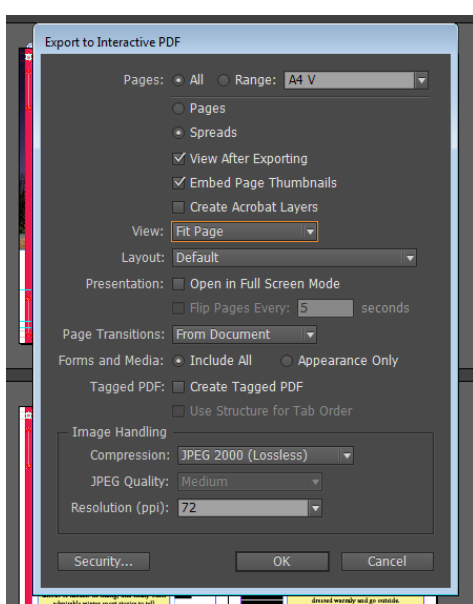


Figure 26: Interactive PDF export settings

6.1.3 Text handling

Using along with visuals proper text allocation creates a full experience for the reader. To fit all the text on the page it is useful to divide it into multiple columns. There are two types of columns configurations in InDesign: “Balanced columns” and “Unbalanced columns”. “Balanced columns” arrange text according to the amount of text in every column and to the number of columns as it may be seen on the Figure 27.

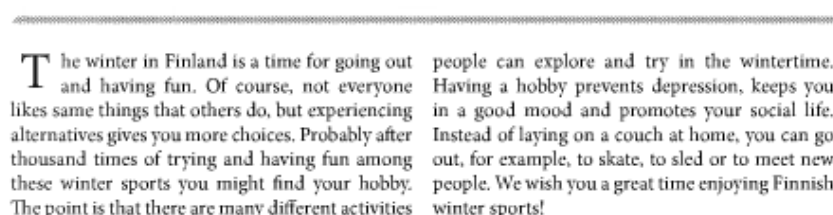


Figure 27: “Balances columns” InDesign example

“Unbalanced columns” arrange text based on the text column filling, meaning when one column will be filled with text then InDesign will switch to another column and so on. “Unbalanced columns” are practical to use, for example, with a framed one sentence caption of the article’s most interesting fact placed inside the columns, as it may be seen on Figure 28. Emphasizing attention on the highlighted and enlarged piece of text helps reader to decide whether he/she would read the whole article or move to the next one.

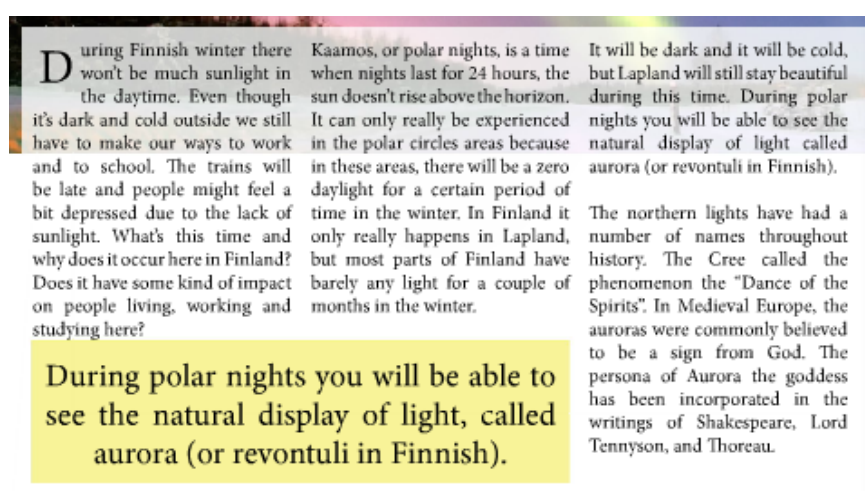


Figure 28: “Unbalanced columns” InDesign example

Both Figure 27 and Figure 28 illustrate the result from turning off hyphenation. As it may be seen text appears to be more solid-like with a corporate-touch applied. Turned off hyphenation provides a feel that publisher had “polished” text to such extend that it has only neces-

sary words organized in the right order. In other words, text can be perceived as one of the visuals.

One more styling feature to notice on Figures 27 and 28 is the presence of character drop-cap. Character drop-cap symbolizes the beginning of the new article or paragraph and shows the first letter of the first word in noticeably larger size than the other text.

6.2 Rational for further implementation

During the production process there were many applicable ideas what were not implemented in the project mostly due project timeframe limitations. This section will enlighten these ideas to complete the overview on the project implementation plan and describe the possible development path to the future contributors.

6.2.1 Content optimization for Newsstand apps

Apple and Google both provide built into their mobile OS's newsstand applications (Apple Incorporated 2014), (Google Incorporated 2015). Expectably, in the future, Microsoft will also provide a similar Newsstand solution (Heller, 2014). As these three companies are the biggest ones in the market of providing mobile and desktop hardware and software solutions, assimilation of these platforms will help to discover more effective ways with reaching the target audience. One of the examples of student related content optimized especially for iOS newsstand application is Oxford student magazine - Oxford Today (Oxford University 2014).

6.2.2 Animation & video elements

Animated elements such as GIF's and short videos can be integrated into the digital publication. This will require exploring the list of features InDesign provides in order to implement such kind of integration. The perception of still picture happens much faster than the apprehension of a video element. This happens due to the fact that video is compiled from many frames and for the person to understand each frame requires more time. Applying this to publication would enlarge the time, what reader would spend looking though the publication's content.

6.2.3 Interactive platform for contributors

For the internal digital publication operations it is useful to have a certain platform or framework, where every contributor can share his/her work with other team members. Dur-

ing my involvement in the project, PAUSE has been provided with Optima workspace. All the Laurea UAS courses have their own Optima workspaces that is the main reason why designing the Optima workspace for PAUSE is an appropriate way to optimize the sharing experience.

7 Interview

The interview is based on the cooperation of a former PAUSE project mentor Järi Wahlström with me (Wahlström 2015). Interviewee is asked to describe the working process, challenges met and benefits gained after the project completion. Interview is organized within Laurea UAS premises in Leppävaara campus.

Please describe your studying and working background connected with Laurea UAS.

I have started my studies at Laurea UAS Leppävaara unit in 2009 on the Service Management degree. In 2011 I have got accepted to the position of an intern to former Leppävaara marketing and communications department. As my internship progressed I have decided to associate it with my thesis.

When and how did your involvement in the project of PAUSE started?

As I completed my internship and thesis I received an offer to continue my previous work as employee when my previous boss went to her maternity leave and I substituted her as Marketing and Communications planner in Laurea Leppävaara. PAUSE project took place almost from the beginning of my work. Based on the state of affairs with PAUSE on the 2014, there had been one year gap in the production. Due to such a long production break it was decided to build a completely new organizational structure, including the recruitment of fresh PAUSE members. During the organization building process I have met many challenges, as for example most of the guiding materials were lost or never existed in the first place, so it was effortful to identify what kind of knowledge is required. Along with materials research the unexpected decisions from Laurea UAS head marketing department had been received. The main point of these decisions was that from now on PAUSE project will be scaled up from one Laurea UAS campus to all seven campuses.

Do you agree that digital publication can change reader's habits? Why do you think so?

Of course it depends on the situation and the particular user needs. Although, taking into consideration nowadays case, when nearly everyone has an access to the connected to internet computer or smartphone, digitally published materials are easier to search for and access. Accessing materials from any type of device without any constrain to location makes

reader's time management more efficient than having a need of, for example, visiting a library.

From your point of view, what was implemented successfully during the project? And, what was missing in the implementation?

Many challenging factors, such as not having enough time and lacking essential production experience, provided for the PAUSE team an opportunity to show their way of coping with stress and producing unique piece of work. As the PAUSE project approached its completion it would be proper to say that the implementation was successful.

How would you assess your former team growth and your own growth in terms of gaining the field related experience?

PAUSE was such kind of project during which it was impossible not to learn new technologies, methods and approaches. It is right to say that we have developed a digital publishing solution from scratch, what means that each team member had gained a tremendous experience in the field.

If you would have an opportunity to return to the starting point of the project, what you would do differently?

I would definitely spend more time on recruiting and planning, not rushing things as it was done in the beginning. The most changes would be connected with pre research and received data analysis. The research would help to set clear points, what can be expected from the project and during what period of time. Having clear results from analysis would aid head marketing team to estimate the resources management.

Was the general goal of the project accomplished?

From my point of view the general goal was accomplished successfully. We have had utilized all the available resources and ensured that every team member is aware of his/her tasks. The results from our work are reflected in the positive Facebook statistics showing that we have tripled the previous maximum number of viewers from 300 to 1500.

8 Conclusions

All the way through this document I have been concentrating most of my attention on the description of organizational and production aspects of digital publication. I believe that such a

deep documented review can serve the purpose of a guideline or a reference used by field related contributors for any projects connected with media digitalization processes.

The project's deliverables were developed within a challenging environment. This project, in general, can be considered as a continuous challenge as from the beginning most of the required knowledge and skills were not present at team's disposal. The acquired expertise provided an irreplaceable basis for this document.

It was challenging to keep contributors - mostly students from Organizational Communication and Implementing Visual Communication courses - motivated and excited during the project. It was surprising that lecturers were ready to cooperate and to support PAUSE project. Lecturers also provided a valuable feedback on how to approach student's contribution and what development path to choose and to follow. The way how lecturers addressed PAUSE provided me confidence to proceed further with publication production. Despite the fact that these two courses are positioned as elective, students still did their very best to provide useful feedback and contribution.

In the beginning of PAUSE project were two main objectives: to gather up a truly creative team to produce publications and to organize the transfer from former Marketing and Communications department to Laureamko student union. I was able to pass the project development to two really hardworking guys: Petra Jääskeläinen and Aleksandr Vlasov, who further succeeded not only to merge PAUSE with Laureamko but also to enlarge the scope of PAUSE work covering Laurea UAS Otaniemi unit. The merge with Laureamko was necessary because it would bring the student magazine closer to the focus area - students and student life. Based upon these outcomes planned project objectives can be considered as achieved.

References

- Adobe Systems Incorporated. 2015. Desktop publishing software | Download free Adobe InDesign CC trial. [Online]. Accessed 24 June 2015.
<https://www.adobe.com/products/indesign.html?promoid=KLXLU>
- AOL Inc. 2014. Issuu Brings Its "YouTube For Magazines" To The iPhone And iPad | TechCrunch. [Online]. Accessed 24 June 2015. <http://techcrunch.com/2014/10/03/issuu-brings-its-youtube-for-magazines-to-the-iphone-and-ipad/>
- Apple Incorporated. 2014. Newsstand - Apple Store Downloads on iTunes. [Online]. Accessed 29 July 2015. <https://itunes.apple.com/us/genre/ios-newsstand/id6021?mt=8>
- Apple Incorporated. 2015. Apple - iOS 8. [Online]. Accessed 25 June 2015.
<http://www.apple.com/ios/>
- Apple Incorporated. 2015. Apple - Safari - Browse the web in smarter, more powerful ways. [Online]. Accessed 29 June 2015. <https://www.apple.com/safari/>
- Bacso, P. & Quintanilha, D. 2014. Web Design and Usability Issues: How people read Webpages, Helsinki: Haaga-Helia UAS.
- Bitly, 2015. Bitly About. [Online]. Accessed 29 June 2015. <https://bitly.com/pages/about>
- Bitly, 2015. Bitly Partners. [Online]. Accessed 29 June 2015.
<https://bitly.com/pages/partners>
- Dawson, C. 2009. Projects in Computing and Information Systems. 2nd ed. Harlow: Pearson Education Limited.
- De Arruda Camara Antonius, 2014. SoleOPS 3.4.7 / Implementation plan. [Online]. Accessed 21 June 2015.
https://soleops.laurea.fi/opsnet/disp/en/ops_OpetTapTeks/tab/tab/sea?page=&opettap_id=11897398&stack=push
- DENSO WAVE INCORPORATED. 2014. History of QR code | QRcode.com | DENSO WAVE. [Online]. Accessed 8 July 2015.<http://www.qrcode.com/en/history/>
- eMarketer Incorporated. 2015. Learn more about us | eMarketer. [Online]. Accessed 13 July 2015. <http://www.emarketer.com/>
- FreeDigitalPhotos.net. 2015. Free Photos - Free Images - Free Stock Photos - FreeDigitalPhotos.net. [Online]. Accessed 20 July 2015. <http://www.freedigitalphotos.net/>
- FUAS. 2015. About FUAS. [Online]. Accessed 18 June 2015.
<http://www.fuas.fi/en/fuas/Sivut/default.aspx>
- Getty Images. 2015. Stock Photography, Royalty-Free Photos, Video Footage & Music | Getty Images. [Online]. Accessed 20 July 2015. <http://www.gettyimages.fi/>
- Ghahrai, A. 2008. Incremental model - Advantages and Disadvantages. [Online]. Accessed 29 July 2015. <http://www.testingexcellence.com/incremental-model/>
- Google Incorporated. 2015. Google Play - Newsstand - Android applications in Google Play. [Online]. Accessed 28 July 2015.
<https://play.google.com/store/apps/details?id=com.google.android.apps.magazines>
- Google. 2012. Google URL Shortener. [Online]. Accessed 17 July 2015. <https://goo.gl/>

- Google. 2014. Android. [Online]. Accessed 25 June 2015. <https://www.android.com/>
- Google. 2015. Chrome. [Online]. Accessed 29 June 2015. <http://www.google.com/chrome/>
- Heller, M. 2014. Microsoft working on newsstand app to combine magazines, books, and comics. [Online]. Accessed 28 July 2015. http://www.phonearena.com/news/Microsoft-working-on-newsstand-app-to-combine-magazines-books-and-comics_id52407
- Jobs, S. 1998. There's Sanity Returning [Interview] (25 May 1998).
- Judah, S. 2013. What is skeuomorphism? - BBC News. [Online]. Accessed 7 July 2015. <http://www.bbc.com/news/magazine-22840833>
- Kovac, P. 2012. A concept for an international knowledge base in Laurea UAS, Leppavaara: Laurea UAS.
- Laurea UAS student magazine PAUSE. 2014. ISSUU - Pause magazine. [Online]. Accessed 22 June 2015. <http://issuu.com/pausemagazine>
- Laurea UAS. 2009. Laurea University of Applied Sciences official Facebook page. [Online]. Accessed 19 June 2015. <https://www.facebook.com/LaureaUAS>
- Laurea UAS. 2009. Laurea University of Applied Sciences official YouTube channel. [Online]. Accessed 19 June 2015 <https://www.youtube.com/user/LaureaUAS>
- Laurea UAS. 2014. Laurea Universitu of Applied Sciences official Pinterest page. [Online]. Accessed 19 June 2015. <https://www.pinterest.com/LaureaUAS/>
- Laurea UAS. 2014. *Laurea University of Applied Sciences official Instagram page*. [Online]. Accessed 19 June 2015. https://instagram.com/laurea_uas/
- Laurea UAS. 2014. Laurea University of Applied Sciences official Twitter page. [Online]. Accessed 19 June 2015. https://twitter.com/Laurea_UAS
- Laurea UAS. 2015. Laurea as an organisation - Laurea-ammattikorkeakoulu. [Online]. Accessed 18 June 2015. <https://www.laurea.fi/en/about-laurea/laurea-as-an-organisation>
- Laurea UAS. 2015. Laurea UAS LIVE Sign In page. [Online]. Accessed 19 June 2015. <https://live.laurea.fi>
- Laurea UAS. 2015. Laurea University of Applied sciences - Laurea-ammattikorkeakoulu. [Online]. Accessed 19 June 2015. <https://www.laurea.fi/en/>
- Microsoft Corporation. 2011. What are 2D barcodes? | Microsoft Tag. [Online]. Accessed 4 August 2015. <http://tag.microsoft.com/what-is-tag/2d-barcodes.aspx>
- Microsoft. 2015. Download Web Browser - Internet Explorer. [Online]. Accessed 29 June 2015. <http://windows.microsoft.com/en-us/internet-explorer/download-ie>
- Microsoft. 2015. Guide to Universal Windows Platform (UWP) apps (Preliminary). [Online]. Accessed 22 June 2015. <https://msdn.microsoft.com/en-us/library/dn894631.aspx>
- Microsoft, 2015. SharePoint - Team Collaboration Software Tools. [Online]. Accessed 19 June 2015. <https://products.office.com/en-US/sharepoint/collaboration?omkt=en-US>
- Microsoft. 2015. Skype features | Learn more about Skype. [Online]. Accessed 7 July 2015. <http://www.skype.com/en/features/>

Microsoft. 2015. The Smartphone Reinvented Around You | Windows Phone (United States). [Online]. Accessed 25 June 2015. <https://www.windowsphone.com/en-us>

Mozilla. 2015. Download Firefox - Free Web Browser - Mozilla. [Online]. Accessed 29 June 2015. <https://www.mozilla.org/en-US/firefox/new/>

MyFrank. 2015. What is Frank? - Frank. [Online]. Accessed 12 July 2015. https://frank.fi/en/what_is_frank/

Official Statistics of Finland, 2014. Statistics Finland. [Online]. Accessed 21 July 2015. http://www.stat.fi/til/sutivi/2014/sutivi_2014_2014-11-06_tie_001_en.html

OKM, 2015. OKM - Polytechnics (Universities of Applied Sciences). [Online]. Accessed 18 June 2015. <http://www.minedu.fi/OPM/Koulutus/ammattikorkeakoulutus/ammattikorkeakoulut/?lang=en>

Opticentre. 2015. Desktop publishing (DTP) - FAQ - Translation Company, Localization, Typesetting, Voice Over, Page translation, Audio translation | Opticentre. [Online]. Accessed 29 July 2015. <http://www.opticentre.net/FAQ/Desktop-publishing-%28DTP%29/History-of-Desktop-publishing/>

Oxford University. 2014. Oxford Today on the App Store on iTunes. [Online]. Accessed 28 July 2015. <https://itunes.apple.com/gb/app/oxford-today/id558832704?mt=8>

Photoshop Essentials. 2015. The 72 ppi Web And Screen Resolution Myth. [Online]. Accessed 22 July 2015. <http://www.photoshopessentials.com/essentials/the-72-ppi-web-resolution-myth/>

Pixabay. 2015. Pixabay - Ilmaisia kuvatt. [Online]. Accessed 20 July 2015. <https://pixabay.com/>

Pixhill. 2012. Pixhill Kuvatoimisto - Suomalaiset ja Eurooppalaiset kuvatoimistokuvat & rajaton latausoikeus. [Online]. Accessed 20 July 2015. <http://www.pixhill.com/asp/index.asp>

Seward, Z. 2013. The New York Times paywall has hit a growth wall - Quartz. [Online]. Accessed 6 July 2015. <http://qz.com/78178/new-york-times-paywall-has-hit-a-growth-wall/>

Shutterstock Incorporated. 2015. Stock photos, Royalty-free Images and Vectors - Shutterstock. [Online]. Accessed 20 July 2015. <http://www.shutterstock.com/>

Statistica Incorporated. 2015. About us | Statistica. [Online]. Accessed 13 July 2015. <http://www.statista.com/aboutus/>

Valenzuela, D. & Shrivastava, P., 2002. Interview as a Method for Qualitative Research. [Online]. Accessed 23 June 2015. <http://www.public.asu.edu/~kroel/www500/Interview%20Fri.pdf>

Wikipedia. 2015. A picture is worth a thousand words - Wikipedia, the free encyclopedia. [Online]. Accessed 20 July 2015. https://en.wikipedia.org/wiki/A_picture_is_worth_a_thousand_words

Wikipedia. 2015. Arthur Brisbane - Wikipedia, the free encyclopedia. [Online]. Accessed 20 July 2015. https://en.wikipedia.org/wiki/Arthur_Brisbane

Wikipedia. 2015. QR code - Wikipedia, the free encyclopedia. [Online]. Accessed 8 July 2015. https://en.wikipedia.org/wiki/QR_code

Wikipedia, 2015. Software prototyping - Wikipedia, the free encyclopedia. [Online]. Accessed 22 June 2015. https://en.wikipedia.org/wiki/Software_prototyping

Wählström, J., 2015. The development of PAUSE digital media source [Interview] (23 July 2015).

Figures

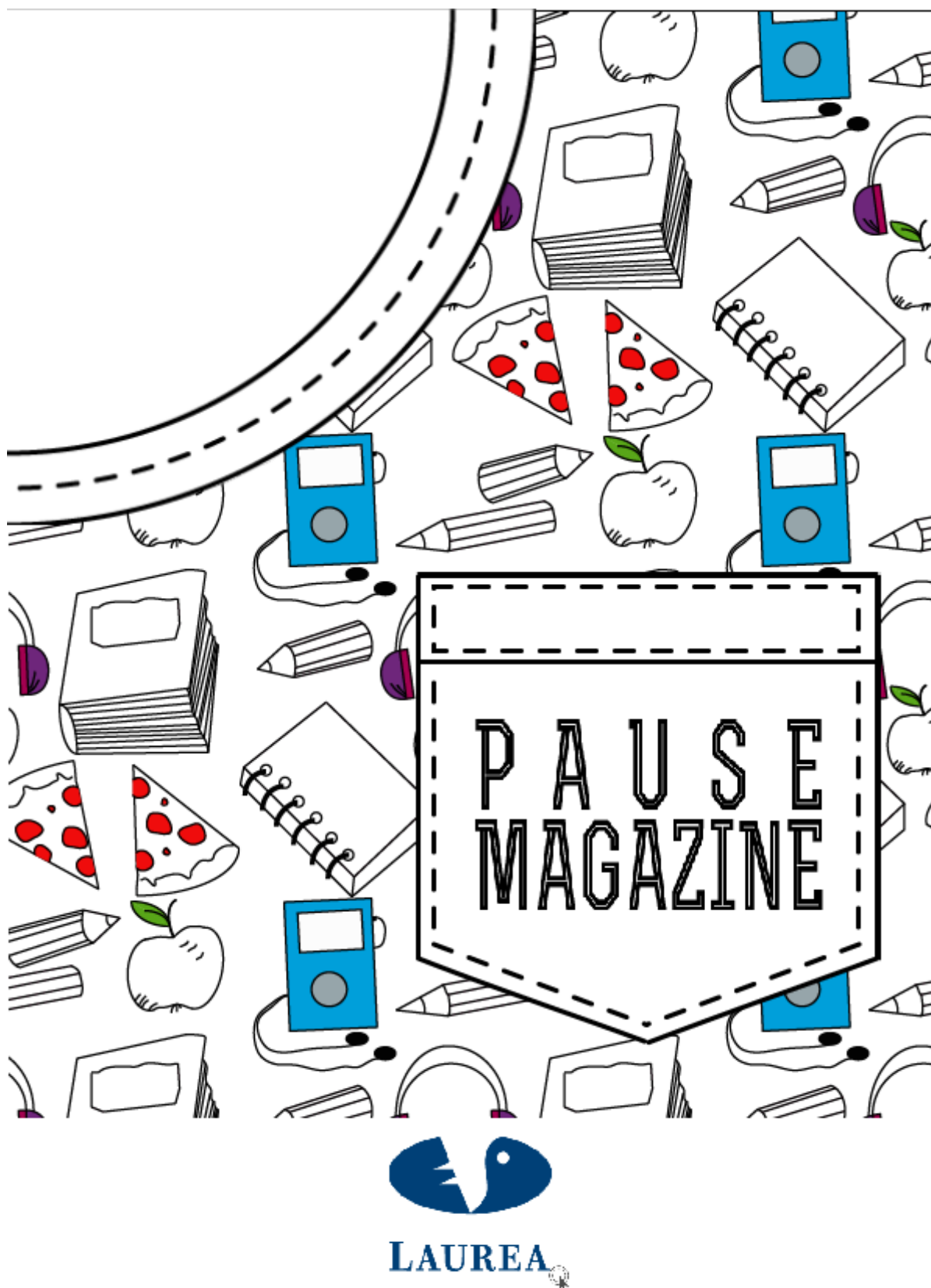
Figure 1: Number of digital subscribers for NYT	8
Figure 2: The structure of the thesis.....	11
Figure 3: PAUSE's profile in ISSUU online newsstand	14
Figure 4: Front page of Laurea LIVE	15
Figure 5: Laurea UAS campus specific news section.....	15
Figure 6: Microsoft Office365 Outlook Calendar meeting example	17
Figure 7: Back and front cover of PAUSE autumn 2014	20
Figure 8: PAUSE winter issue 2014 front cover	21
Figure 9: InDesign document setup	22
Figure 10: InDesign page setting window	23
Figure 11: InDesign CC A-Master pages.....	24
Figure 12: "A-Master" and "None master" appliance example.....	24
Figure 13: Example of photography appliance in visuals for cover production	25
Figure 14: PAUSE page in Laurea LIVE.....	27
Figure 15: PAUSE autumn issue 2014 Laureamko events page	28
Figure 16: QR utilization in PAUSE 2014 winter issue A2 poster	29
Figure 17: PAUSE Facebook front page	30
Figure 18: PAUSE winter issue 2014 MyFrank advertisement	31
Figure 19: Traffic of the Pause winter issue 2014 shortened Bitlink	33
Figure 20: Google URL Shortener front page.....	33
Figure 21: ISSUU Lifetime Statistics for Pause magazine	34
Figure 22: InDesign CC interactive buttons	35
Figure 23: Interactive element icon	36
Figure 24: ISSUU Web & Video links integration.....	36
Figure 25: ISSUU publication integrated links appearance	37
Figure 26: Interactive PDF export settings	37
Figure 27: "Balances columns" InDesign example	38
Figure 28: "Unbalanced columns" InDesign example.....	38

Tables

Table 1: Number of social network users worldwide from 2010 to 2018 (in billions).....	30
--	----

Appendices

Appendix 1: PAUSE Autumn 2014 issue.....	50
Appendix 2: PAUSE Winter 2014 issue.....	51





Appendix 2: PAUSE Winter 2014 issue